



## GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

AUGUST 14, 2003

<u>TM GRAIN TRANSPORT COST</u> <u>INDICATORS</u>	<u>Ocean</u>				
	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 08/14	100	158	90	151	154
Compared to Last Week	↑	↓	↑	↑	↑
*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan					

**Port Authority Preserves Rural Railroad Service in Kansas.** Rail service has greatly improved since the Kansas Legislature approved the creation of the Port of Pittsburg Port Authority to purchase 920 miles of track in south-central and western Kansas (previously operated by the Central Kansas Railroad) and to provide 20 years of annual tax abatements to help finance the rehabilitation of track. Now in its third year of operation, the Kansas and Oklahoma Railroad (K&O) has increased the number of customers by 30 percent over the previous year, and grain elevators on the K&O report excellent service during the 2003 wheat harvest (*Wichita Eagle*). In a presentation at Great Bend, KS, in January 2000, USDA's Agricultural Marketing Service provided information supporting the creation of a port authority to preserve service on these lines.

The formation of the Port of Pittsburg Port Authority is the second time the State of Kansas has successfully preserved rural rail service by forming a port authority. In 1982, the late State Senator McDill "Huck" Boyd championed the formation of the Mid States Port Authority, which purchased 421 miles of track in northern Kansas, northeastern Colorado, and southern Nebraska from the bankrupt Rock Island Railroad. Kyle Railroad still successfully provides rail service on the line. [Marvin.Prater@usda.gov](mailto:Marvin.Prater@usda.gov)

**TSB Publishes Report Profiling Containerized Grain Industry.** Transportation Services Branch (TSB), USDA, in cooperation with the Upper Great Plains Transportation Institute (UGPTI) at North Dakota State University, recently published the second phase of a two-phase study profiling the containerized grain shipping industry. Using a variety of data sources, including a survey conducted by UGPTI, the report profiles the current practices and expectations of shippers. The survey results suggest that premiums for containerized grain and oilseed products are \$5 per hundredweight above the local bulk counterpart market price. The net return to shippers is opaque as business practices and market fundamental influence the costs associated with delivering the product to a customer overseas, versus a local grain terminal or processor. Shippers report that container exports increased annually between 2000 and 2002 and are projecting it will increase another 20 percent by 2005. Although many factors affect industry ability to realize this growth, shippers consider ocean freight rates to be one of the most crucial.

The full report is available on AMS' Web site at: [www.ams.usda.gov/tmd/ipgrainprofile](http://www.ams.usda.gov/tmd/ipgrainprofile), [Heidi.Reichert@usda.gov](mailto:Heidi.Reichert@usda.gov)

**Contents**

Rail .....	4
Barge .....	7
Truck .....	9
Grain Exports .....	10
Container .....	13
Canadian Ports .....	14

The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

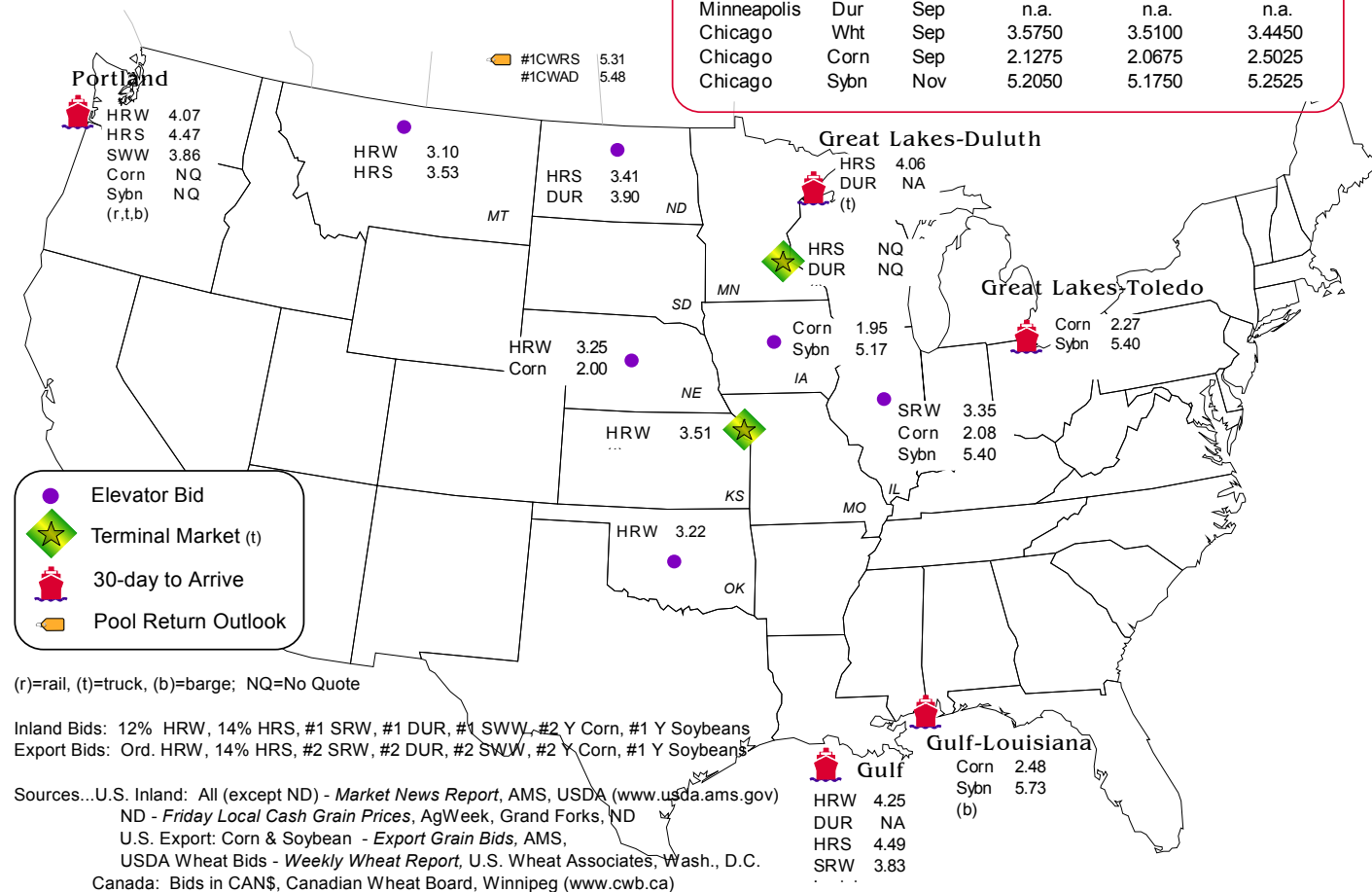
### Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)

Commodity	Origin-- Destination	This week	Last week
Corn	IL -- Gulf	-0.40	-0.37
Corn	NE -- Gulf	-0.48	-0.45
Soybean	IA -- Gulf	-0.56	-0.50
HRW	KS -- Gulf	-0.74	-0.65
HRS	ND -- Portland	-1.06	-1.15

The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

## Grain Bid Summary

Futures:			08/08/2003	Week Ago 08/01/2003	Year Ago 08/09/2002
Kansas City	Wht	Sep	3.5300	3.4650	3.8175
Minneapolis	Wht	Sep	3.6850	3.7025	3.4450
Minneapolis	Dur	Sep	n.a.	n.a.	n.a.
Chicago	Wht	Sep	3.5750	3.5100	3.4450
Chicago	Corn	Sep	2.1275	2.0675	2.5025
Chicago	Sybn	Nov	5.2050	5.1750	5.2525

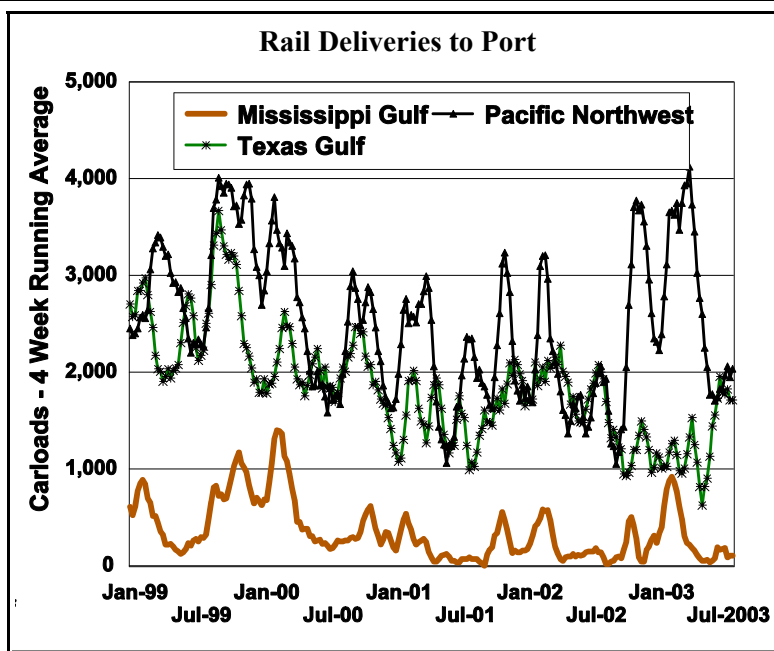
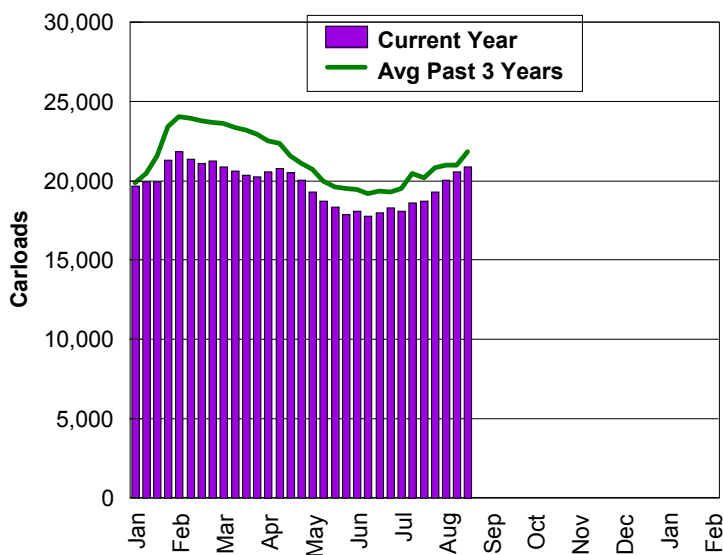


<b>RAIL TRANSPORTATION</b>
----------------------------

**Rail Deliveries to Port (Carloads)**

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
07/23/03	101	1,886	1,579	153	3,719
07/30/03	133	1,382	2,447	104	4,066
YTD 2003	9,479	40,253	85,257	10,799	145,788
YTD 2002	7,084	58,423	61,157	14,513	141,177
% YTD 2002	134%	69%	139%	74%	103%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

**Grain Car Loadings for Class I Railroads**


---

Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

---

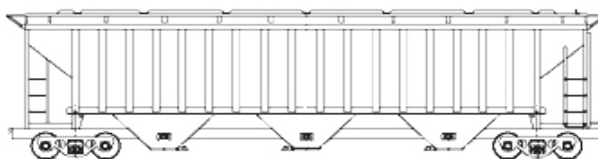
**Class I Rail Carrier Grain Car Bulletin** (Grain Carloads Originated and Grain Service Index)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
08/02/03	2,569	3,221	7,725	536	6,456	20,507	3,418	4,006
This Week Last Year	2,479	2,923	7,127	410	6,575	19,514	3,588	4,059
2003 YTD	85,678	99,859	221,860	11,682	199,744	618,823	105,167	108,301
2002 YTD	86,865	96,812	226,923	17,443	206,231	614,760	125,579	111,248
% of Last Year	99%	103%	98%	67%	97%	101%	84%	97%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

**U.S. Rail Covered Hopper Cars Online Index\***

July-03	93.5	96.5	92.9	88.5	92.9	93.4
---------	------	------	------	------	------	------

Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

**Tariff Rail Rates for Unit Train Shipments**

August 2003

Source: [www.bnsf.com](http://www.bnsf.com), approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu\*

Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
08/04/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
08/04/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
08/04/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
08/04/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
08/04/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
08/04/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
08/04/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
08/04/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
08/04/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.47
08/04/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
08/04/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
08/04/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
08/04/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
08/04/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
08/04/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.51

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Aug-03	Sep-03	Oct-03	Nov-03
BNSF-GF	\$125	\$120	\$84	\$31
UP-Pool	\$0	\$10	\$31	\$21

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

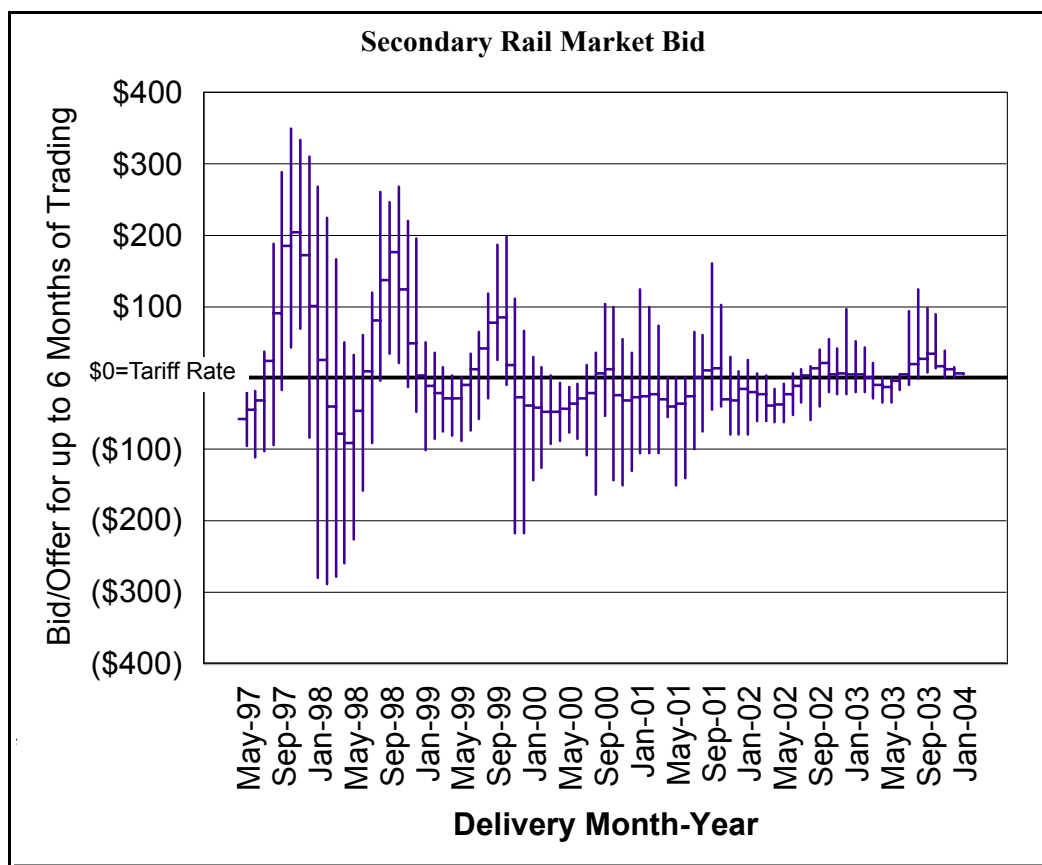
**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Sep-03	Oct-03	Nov-03
COT/N. Grain	sold out	\$6	\$28
COT/S. Grain	\$95	\$5	\$0
GCAS/Region 1	no bid	\$2	no bid
GCAS/Region 2	no bid	\$2	no bid

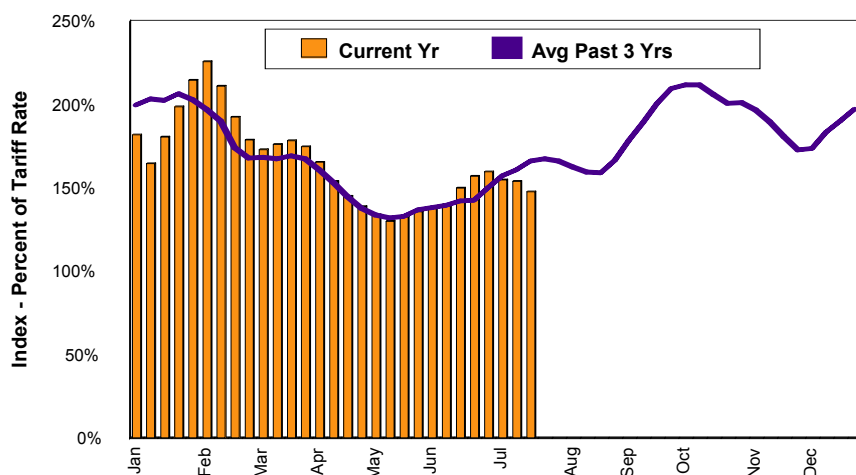
Source: Transportation &amp; Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System



## BARGE TRANSPORTATION

### Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton:  
 $\text{Index} \times \text{1976 Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

### BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	8/7/03	7/30/03	Sept '03	Nov '03
Twin Cities	199	197	237	256
Mid-Mississippi	159	158	221	214
Illinois River	151	151	214	201
St. Louis	133	123	196	168
Lower Ohio	145	138	215	179
Cairo-Memphis	124	110	190	159

Source: Transportation & Marketing /AMS/USDA

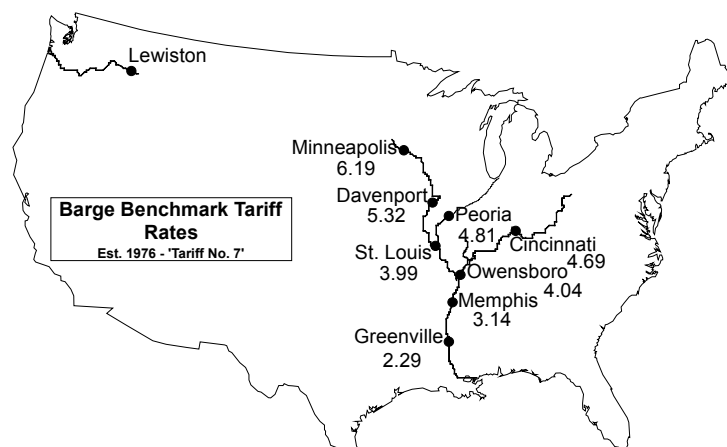
### BARGE FUTURES MARKET

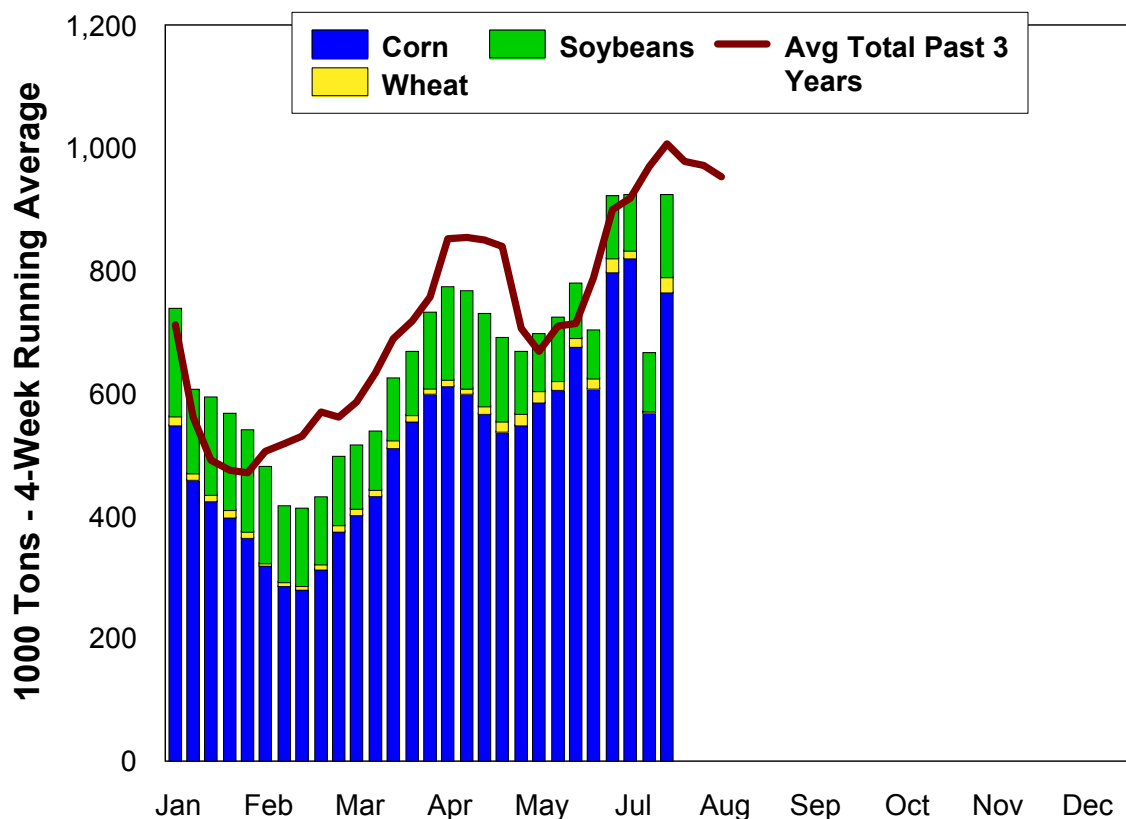
#### Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
8/12/03	St. Louis	Sep.	n/a	195
		Nov.	n/a	165
		Jan.	n/a	140
		Feb.	n/a	140
	Illinois River	Mar	n/a	140
		Sep.	n/a	210
		Nov.	n/a	195
		Jan.	n/a	200
		Feb.	n/a	185
		Mar	n/a	170

Source: St. Louis Merchants Exchange



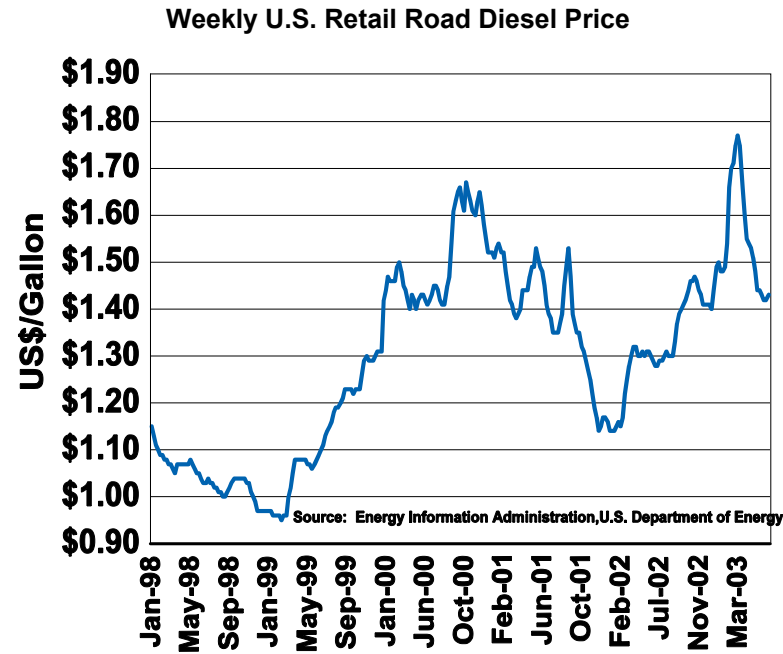
**Barge Movements on the Mississippi River (Lock 27)****Barge Grain Movements (1,000 Tons)**

for week ending 8/02/03

	<u>Corn</u>	<u>Wht</u>	<u>Sybn</u>	<u>Total</u>
<b>Mississippi River</b>				
Rock Island, IL (L15)	300	6	79	387
Winfield, MO (L25)	442	28	87	560
Alton, IL (L26)	572	55	144	775
Granite City, IL (L27)	582	53	138	775
<b>Illinois River (L8)</b>	117	18	31	166
<b>Ohio River (L52)</b>	11	18	17	63
<b>Arkansas River (L1)</b>	0	60	0	60
2003 YTD	17,799	1,346	5,090	24,710
2002 YTD	21,599	1,431	6,382	30,423
% of 2002 YTD	83%	94%	80%	82%
Total 2001	31,878	2,679	10,616	47,091

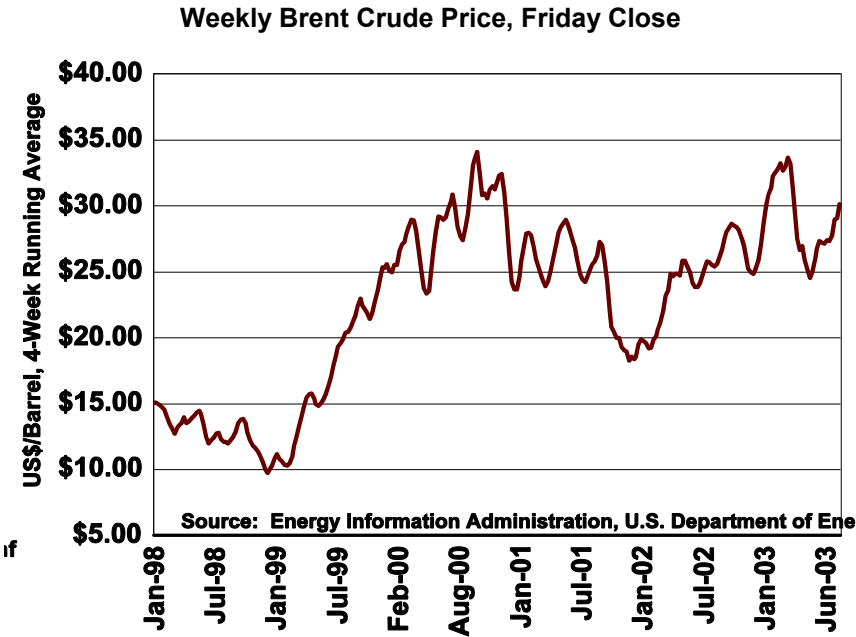
Source: U.S. Army Corp of Engineers,  
YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

TRUCK TRANSPORTATION



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.



Crude Oil Prices (08/12/03)			
US\$ per Barrel	This Week	Last Week	
Light Sweet Crude (NYMEX)	31.46	31.56	↓
Brent Crude	30.23	30.22	↑

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import



<b>GRAIN EXPORTS</b>
----------------------

<b>U.S. Export Balances (1,000 Metric Tons)</b>									
	HRW	SRW	HRS	<b>Wheat</b>			<b>Corn*</b>	<b>Soybean*</b>	<b>Total</b>
				SW W	DUR	All			
07/31/2003	1,930	404	1,292	504	149	4,279	6,474	7,511	18,264
This Week Year Ago	1,145	394	1,175	685	127	3,524	4,596	1,405	9,525
Cumulative Exports-Crop Year									
03/04 YTD	1,701	577	840	564	146	3,827	36,739	28,161	68,727
02/03 YTD	1,572	527	836	485	176	3,596	43,489	28,677	75,762
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)									

### U.S. Grain Inspected for Export



### Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)

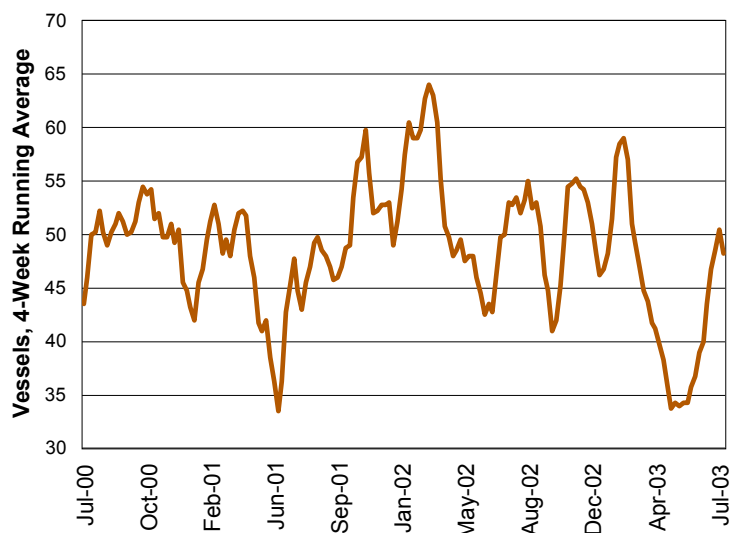
	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
08/07/03	187	24	13	300	428	134	138	0	0	224	862	138
2003 YTD	4,892	3,051	2,695	3,037	17,138	10,256	3,194	529	56	10,639	30,432	3,779
2002 YTD	5,047	2,743	1,421	3,531	23,572	10,566	3,874	214	350	9,211	37,670	4,438
% of 2002 YTD	97%	111%	190%	86%	73%	97%	82%	247%	16%	115%	81%	85%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906

Source: Federal Grain Inspection Service YTD-Year-to-Date

### Gulf Port Region Grain Vessel Loading Past 7 Days

The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.



### Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	<u>In Port</u>	<u>Loaded 7-Days</u>	<u>Due Next 10-Days</u>	<u>In Port</u>	<u>In Port</u>
07/31/03	23	48	67	4	8
08/07/03	28	47	65	10	7
2002 Range	(15..55)	(33..66)	(44..82)	(3..15)	(0..12)
2002 Avg	35	51	65	8	5

Source: Transportation & Marketing /AMS/ USDA

### Quarterly Ocean Freight Rates

Average Rates & Percentage Changes, U.S. Dollars/Metric Ton

	2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change		2003 2 <sup>nd</sup> Qtr	2002 2 <sup>nd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$31.53	\$19.43	62%	Japan	\$19.33	\$11.03	75%
Mexico	-	\$46.92	-				
N. Europe	\$18.98	\$13.58	40%	<b>Argentina/Brazil to</b>			
N. Africa	\$21.75	\$15.84	37%	Med. Sea	\$24.50	\$16.98	44%
Med. Sea	\$21.88	\$12.62	73%	N. Europe	-	\$17.16	-
				China	\$32.50	-	-

Source: Transportation & Marketing/AMS/USDA

**Ocean Freight Rates for Selected Shipments - week ending 08/09/03**

<b>Export Region</b>	<b>Import Region</b>	<b>Grain</b>	<b>Month</b>	<b>Volume Loaded (Tons)</b>	<b>Freight Rate (\$Ton)</b>
U.S. Gulf	Lisbon/Hamburg	Grains	Aug 1/10	55,000	\$20.00 Equiv
U.S. Gulf	Angola	Wheat	Aug 1/11	7,460	\$60.00*
PNW	Bangladesh	Grains	Aug 1/10	23,750	\$119.88*
PNW	Bangladesh	Grains	Aug 1/10	5,000	\$44.00
U.S. Gulf	Djibouti/Pt. Sudan	Wheat/Sorghum	Sep 20/30	30,000	\$38.85
River Plate	Philippines	Meals	Aug 12/20	40,000	\$35.25

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

<b>CANADIAN PORTS ACTIVITY</b>
--

**Select Canadian Port Export Inspections** 1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
06/19/2003			
Vancouver	105	5	
Prince Rupert			
Prairie Direct	5		
Thunder Bay	18		
St. Lawrence	4,492	2,329	290
2001/02 YTD	10,666	2,963	961
2002/03 YTD	4,620	2,334	290
% of Last Year	43%	79%	30%

Source: Canadian Grains Commission, Crop Year 8/1-7/31

CONTAINER

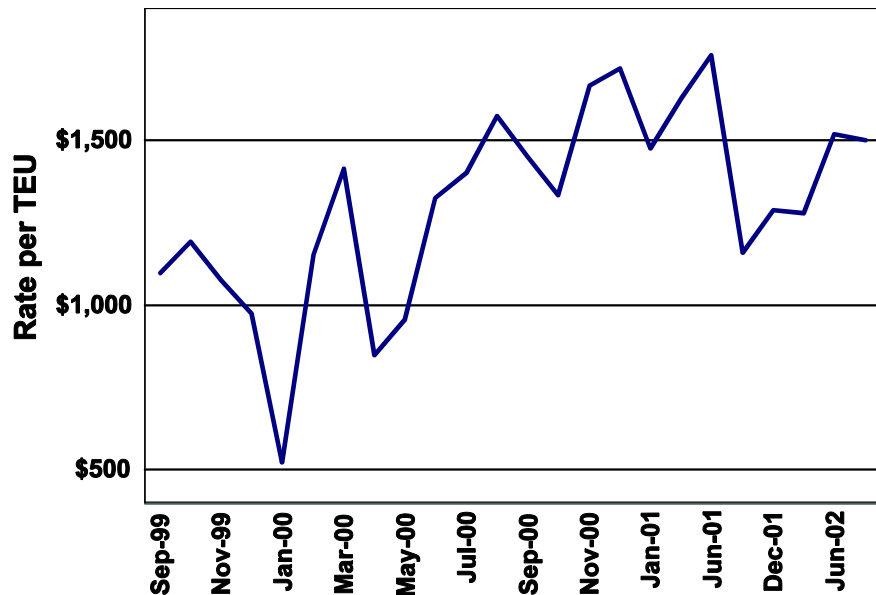
**Container Ocean Freight Rates**

Average Rate per TEU, Weighed by Shipping Line Market Share

Source: Transportation &amp; Marketing/AMS/USDA, Quarterly Updates

**Container Rates - Soybeans**

Seattle, WA Origin to Tokyo, Japan



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

**Container Rates - Feed Grain**

Seattle, WA Origin to Selected Destinations

